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ABSTRACT

This report describes and evaluates a program to provide bilingual instruction in mathematics, science, social studies, industrial arts, business education, and career education to Spanish speaking high school students varying in range of need and ability from those in need of basic skills to honor students. The program, as implemented in 1980-81, developed individualized programs based on students' learning needs and graduation requirements. Aside from instruction, the program included curriculum development activities, counseling and guidance services for students, staff training and development, and opportunities for parental and community involvement. The attendance rate for the program was found to be lower than that for the school as a whole. The program's rate of student suspension equaled that of the school but was higher than the rate for the program of the preceding year. A general pattern of low achievement was observed in the content areas (mathematics, science, and social studies), which was explained partly by the fact that the program was designed to attract career oriented rather than college oriented students, and partly by the high incidence of absenteeism in the program. It was recommended that courses of study be revised and that efforts to identify students' needs be continued. (MJL)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

Grant Number: G008006765

Project Number: 5001-56-17647

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Project Number 500-56-18404

ADLAI E. STEVENSON HIGH SCHOOL

BILINGUAL ACADEMIC AND TECHNICAL

EDUCATION FOR YOUTH PROGRAM (BATEY)

1980-1981

Principal:
Myrna F. Wohlberg

Director:
Al Riccardi

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NEW YORK CITY PUBLIC SCHOOLS
OFFICE OF EDUCATIONAL EVALUATION
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BILINGUAL ACADEMIC AND TECHNICAL EDUCATION FOR YOUTH PROGRAM (BATEY)

ADLAI E. STEVENSON HIGH SCHOOL

Location:	1980 Lafayette Avenue, Bronx, New York 10473
Year of Operation:	1980-81 First Year of Funding
Target Language:	Spanish
Number of Students:	280
Principal:	Myrna F. Wohlberg
Project Director:	Al Riccardi

I. CONTEXT

Adlai E. Stevenson High School is located in an area of Southeastern Bronx known as Soundview. Recently constructed low and middle income developments and a popular shopping center (of which the major store, E.J. Korvette, has closed) transformed what was once a sparsely populated area into a large developing community. The area north of the school has not changed as much and remains an area of one- and two-family homes with a large industrial sector bordering it. Residents of the community are predominantly black and Puerto Rican. Many of them are recent arrivals from Puerto Rico and an increasing number are from other Latin American countries.

The major means of travel are the number six train and the Bruckner Expressway, which cuts through the neighborhood. For many residents, the number six train is the connection with the city for employment, recreation, and other city services. Because of the extent of the attendance area, many students live a considerable distance

from the school and have to use a combined means of transportation to get to it.

An attractive modern architectural structure, Adlai E. Stevenson High School opened in 1970. The school and the area project an image of newness. The school atmosphere is a pleasant one and both teachers and students appear to find it comfortable. Stevenson students, however, suffer many of the social problems of inner city students. As of May 15, 1981 there was total school population of 3,473. Nearly 60 percent were from low-income families and 55 percent qualified for free lunch.

The ethnic composition of Stevenson's student body is approximately 52 percent Hispanic, 46 percent black and 2 percent other (Oriental and white). The greatest number of Hispanic students are Puerto Rican (35 percent), although the number of students from the Dominican Republic is increasing. Nearly 49 percent of the Hispanic population -- 851 students -- are of limited English proficiency (LEP) as defined by a Language Assessment Battery (LAB) score below the twenty-first percentile.

II. STUDENT CHARACTERISTICS

The bilingual program served approximately 280 students during 1980-1981. The students represented the following two distinct groups: recent arrivals from Puerto Rico, South America, and the Caribbean; and students who were born and/or raised in New York City. The majority of the immigrant students, about 45 percent, are from Puerto Rico; about 20 percent originate from the Dominican Republic; and the rest from other Latin American countries. These students, who represent 84

percent of the total number of students served, speak little or no English. They range in Spanish proficiency from students who have benefited from excellent educational experiences to students who have received very little formal education (less than fifth grade) in systems where poverty precluded even the most essential educational assistance. About four to five students registered this year had no schooling at all.

The majority of the U.S.-born students use a mixture of English and Spanish and often have trouble with both. They speak Spanish at home, English in school, and a mixture of both in the streets. The largest number of those with poor literacy skills are found among students educated here. These students are in most cases equally limited in English and Spanish.

The home language for both groups is usually Spanish, with 95 percent or 218 students speaking Spanish at home and 8 percent speaking English. An exception to the above were six Chinese students enrolled this year. These receive counseling and take E.S.L. and subject-area courses taught in English.

Table 1 presents a breakdown by country of origin of program students for whom information was reported.

Table 1. Number and percentage of students by country of birth. (N=277)

COUNTRY OF BIRTH	NUMBER OF STUDENTS	PERCENT OF PROGRAM
Puerto Rico	125	45%
Dominican Republic	52	20%
U.S.	38	14%
Colombia	33	12%
Hong Kong	6	2%
Costa Rica	5	2%
Cuba	4	1%
Panama	4	1%
Honduras	3	1%
Nicaragua	3	1%
El Salvador	2	--
Mexico	1	--
Ecuador	1	--

- .84 percent of the program students are from Spanish-speaking countries.
- .14 percent of the students are American-born and have entered the program from feeder schools.
- .Two percent of the program participants are Chinese students from Hong Kong.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school.

Table 2 presents the distribution of bilingual program students by grade and sex.

Table 2. Number and percentages of students by sex and grade.

GRADE	SEX: MALE N	MALE PERCENT OF GRADE	FEMALE N	FEMALE PERCENT OF GRADE	TOTAL N	COLUMN TOTAL: PERCENT OF ALL STUDENTS
9	63	50%	64	50%	127	46%
10	24	41%	35	59%	59	22%
11	21	37%	36	63%	57	21%
12	14	45%	17	55%	31	11%
TOTAL	122	45%	152	55%	274	100%

- The percentages of male and female students are equivalent in the ninth grade.
- By the twelfth grade, the percentage of female students has risen to 55 percent, while male students have dropped to 45 percent.
- The student population decreases as the grade level increases, from 46 percent in the ninth grade to 11 percent in the twelfth grade.

Because many of the Stevenson bilingual students are immigrants, (many having arrived less than a year ago), their educational histories may vary considerably. Many have suffered interrupted schooling, or, because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 3.

Table 3. Number of students by age and grade.*

AGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	2				2
15	24	4	1		29
16	47	21	1		69
17	33	19	12	2	66
18	13	8	30	9	60
19	5	6	9	10	30
20	1	1	3	6	11
21				4	4
TOTAL	125	59	56	31	271
Percent Overage For Their Grade	79%	58%	75%	65%	72%

*Shaded boxes indicate the expected age range for each grade.

- 72 percent of the program students are overage for their grade.
- The highest percentage of overage students occurs in the ninth grade.

As Table 3 indicates, the fact that so many students are overage may have implications for interpreting student outcomes and setting standards for expected rates of growth. These are students who have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire oral and literacy skills in English.

In summary, the bilingual program students vary in range of need and ability from students in need of basic skills to honor students. They are heterogeneous in academic ability, income level, quality of educational experience prior to Stevenson, and cultural background.

III. PROGRAM DESCRIPTION

The school year 1980-81 was the first year of funding of the BATEY Program. During the previous five years, the Comprehensive Bilingual Education Program was carried out and succeeded in becoming institutional as a department. The previous program, funded by Title VII, provided services to participating students in the general and academic areas of math, science, and social studies. The BATEY Program adds industrial arts, business education, and career guidance to the above-mentioned subjects.

The goal of industrial arts instruction is "to offer students a high interest curriculum which will motivate their completion of high school; to develop skills which will make students more employable and improve students' English language skills."

The goal for the business education instruction is "to offer a high interest curriculum; to impart skills which will make the students employable and to improve English language skills."

The career guidance program is intended to orient students to American society, to provide career exploration guidance and information, and to help in the resolution of adjustment problems.

The BATEY Program provides structure and support to bilingual education at Stevenson High School through coordination, curriculum development, career counseling and guidance, and staff training.

The Title VII staff consists of the following personnel:

-- Project Director
-- Assistant Director

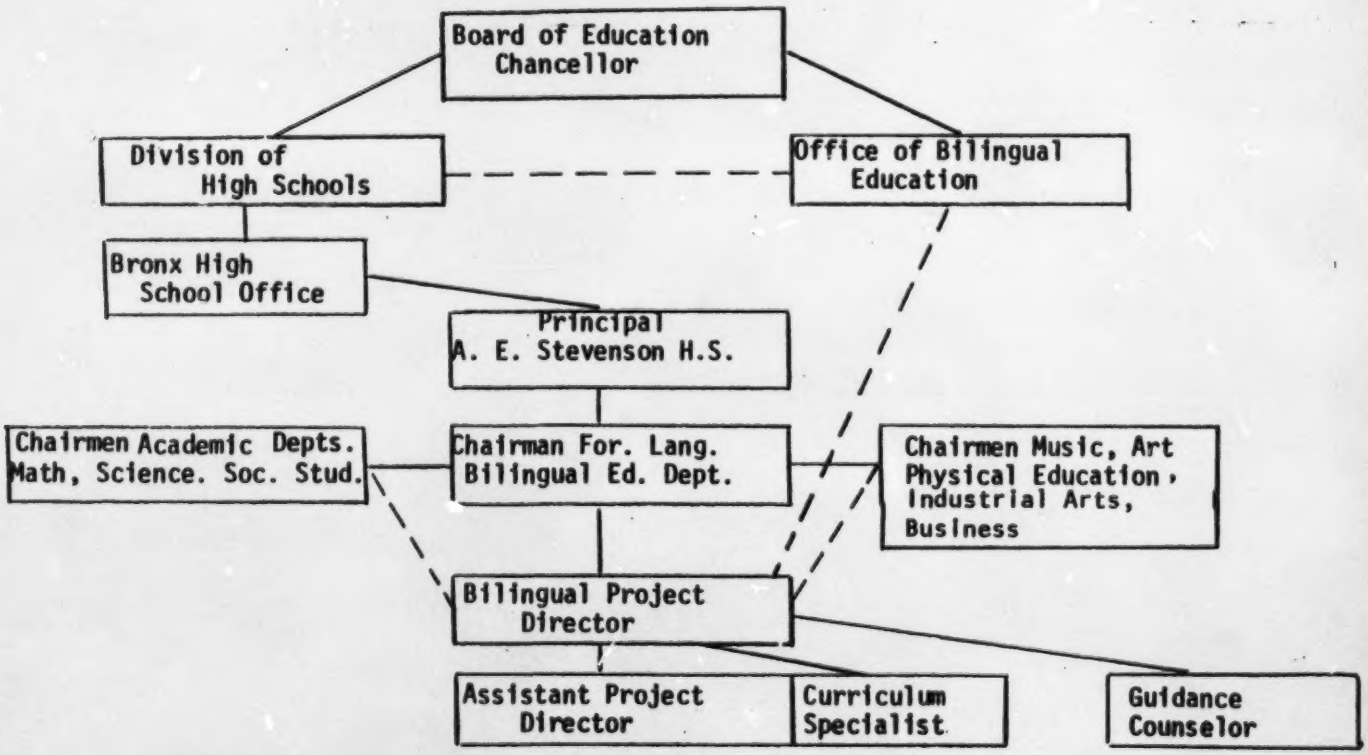
-- Guidance Counselor

-- Curriculum Developer

-- Paraprofessional

Chart 1 shows the organization of the BATEY program in 1980-1981.

Chart 1. Organization of the program staff.



Some staffing modifications took place as a result of resignations or transfers during the year. The regular bilingual social studies teacher transferred to another school and a substitute with a Spanish license was hired to take her place. In February, a licensed social studies teacher was assigned to the class. In the same month, a bilingual math teacher resigned and the Chapter 720 teacher took the resigning teacher's program. A substitute with a Spanish license was hired to teach the Chapter 720 class.

Due to the inability to obtain bilingual staff, the industrial arts courses and the business courses are being taught respectively by the chairman of the industrial arts department and by a licensed English as a second language (E.S.L.) teacher. They are assisted by paraprofessionals.

The late funding of the program reduced the total number of courses to be offered. The administration was not willing to form more classes since it felt the curricula would not be available in time and there would not be sufficient time to development them.

FUNDING

Table 4 shows instructional and non-instructional components of the bilingual program including funding sources and number of personnel. The funding comes from a variety of sources. Generally, E.S.L. and English reading classes are supported by Title I/P.S.E.N. and tax levy funds; social studies, science, math, and the industrial arts and business courses are completely funded by tax levy funds. New York State Chapter 720 funds support mathematics instruction in addition to the tax levy staff. Non-instructional components are principally supported by Title VII funds.

Table 4. Funding source by program component.

	INSTRUCTIONAL COMPONENT		
	FUNDING SOURCE	NUMBERS OF PERSONNEL: TEACHERS	PARAS
E.S.L	Tax Levy/ P.S.E.N. Title I	2.0	.8
Reading (English)	Tax Levy	.4	.2
Native Language	Tax Levy	2.0	-
Math	Tax Levy	1.2	-
	Chap. 720	-	1.0
Social Studies	Tax Levy	1.2	-
	Title VII	-	.2
Science	Tax Levy	.4	-
	Title VII	-	.4
Industrial Education & Business	Tax Levy	.8	-
	Title VII	-	.6

Table 4.
(continued)

NON-INSTRUCTIONAL COMPONENT

	FUNDING SOURCE	PERSONNEL: NUMBER AND TITLE
Administration & Supervision	Tax Levy Title VII	Assistant Principal (.3) Project Director (1) Assistant Project Director (.5)
Curriculum Development	Title VII	Curriculum Developer (1)
Supportive Services	Title VII	Counselor (1)
Staff Development	Title VII	Project Director and Assistant, Curriculum Developer
Administrative Support	Title VII	Secretary (1)

IV. INSTRUCTIONAL COMPONENT

PLACEMENT AND PROGRAMMING

Individualized programming is a special feature of the bilingual program at Aldai E. Stevenson High School. All students are assisted by the guidance counselor in choosing the program best fitted to their previous school records, current needs, and career goals.

In order to participate in the program, students take the LAB Test. An interview is used to determine the extent of the students' language dominance, their interest in industrial arts or business, and to select the academic areas of the program. Students' programs are based on their E.S.L. needs, their math level, their reading level in Spanish, their career interest, and the requirements they need to fulfill for graduation.

All students take some science, social studies, and either fundamental math or algebra. Depending on their language ability, they take either E.S.L. or a mainstream English class. They also have a choice of industrial arts and/or business courses.

In addition to receiving regular bilingual programming, all students who need remedial math assistance participated in a math skills class supported by New York State Chapter 720 funds during 1980-81. Approximately 100 students are served by this program.

INSTRUCTION

Table 5 shows shows the courses offered in English as a second language with student enrollment, level of course, and material in use.

Table 5. Instruction in English as a second language.

COURSE TITLE AND LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REG.	CLASS PDS. PER WEEK	CURRICULUM OR MATERIAL IN USE
FEQA - Beg.	1	15	10	Lado 1
FEQB - Beg.	2	15	20	Lado 2
FEQC - Interm.	1	22	10	Lado 3
FEQD - Advanced	1	27	5	Lado 3
FEQE - Advanced	1	19	5	Lado 4
FE2 - Beg. Reading	1	32	5	Standard Texts
FE4 - Interm. Reading	1	34	5	Standard Texts

English

English language instruction is an important component of every student's program. Approximately 67 students receive intensive instruction in English as a second language for 15 periods per week (three periods daily), while 46 receive it five periods a week along with five periods of remedial reading. Another 125 students take English reading and language arts courses for five periods per week. Of these students, approximately 80 percent take remedial English reading, 12 percent follow a modified academic program in English and 8 percent -- students who have studied English for three to four years and had good E.S.L. skills at entry -- take the regular academic program in English.

Native Language

Students take content-area courses in math, science, and social studies in Spanish. These courses make use of the curriculum and materials developed by the previous bilingual program over its five years of operation and of commerically produced materials. All content-area courses meet

for five periods per week. In addition, all students take a Spanish course to improve their knowledge and command of their native language. For a comprehensive listing of native language arts and bilingual content-area courses, including number of classes, average register, and other related information, see Tables 6 and 7.

Table 6. Instruction in Spanish language and literature.*

COURSE TITLE AND LEVEL	AVERAGE CLASS REGISTER
Spanish 1	28
Spanish 2	21
Spanish 3	35
Spanish 4	31
Spanish 5	19
Spanish 6	35
Puerto Rican Lit.	21

*Each class was held for five periods per week, stressing grammar, reading, and writing for native speakers using standard texts.

Industrial Arts and Business

Students can take either an industrial arts course -- mechanical drawing -- or a business course -- record keeping or typing. These courses are non-academic and are intended to motivate students to remain in school who might not normally do so.

The classes were to have been taught in Spanish. Because of the unavailability of bilingual teachers to teach these subjects,

Table 7. Bilingual instruction in content areas.*

COURSE TITLE	NUMBER OF CLASSES	AVERAGE REGISTER	CRITERIA FOR SELECTION OF STUDENTS	PERCENT OF MATERIALS IN NATIVE LANGUAGE
Eastern Civilization General	3	27	Teacher Recommendation	100
Western Civilization General	1	32	Teacher Recommendation	100
American Studies I General	1	30	Teacher Recommendation	100
American Studies II General	1	30	Teacher Recommendation	100
Fundamental Mathematics General	6	22	Teacher Recommendation	100
Mathematics Skills Remedial	5	15	Teacher Recommendation	100
Algebra Academic	1	12	Teacher Recommendation	100
General Introduction Physical Science**	1	35	Teacher Recommendation	100
General Biology	1	26	Teacher Recommendation	100
Caribbean Studies	1	28	Teacher Recommendation	100
Spanish Civilization	1	23	Teacher Recommendation	100
Mechanical Drawing Level I**	2	18	Elective	5
Typing Level I	1	22	Elective	0
Record Keeping Level I	1	15	Elective	0

*All materials were appropriate to students' reading level and corresponded to the mainstream curriculum.

**Materials did not correspond to mainstream curriculum.

the classes are being taught in English. In two out of the four classes the paraprofessionals play an important role in translating material and instructions and generally helping students with their work. In the classes conducted in English only, the students participating have a level of E.S.L. which is adequate enough for them to function successfully in these classes.

Discussion with students in the industrial arts classes indicated that they felt comfortable with the classes being conducted in English and that the paraprofessionals' assistance in Spanish was very helpful.

Of the courses offered, science is in the non-academic track because of the lack of a licensed teacher; math has both academic and non-academic tracks, and social studies has a general track.

Stevenson, in general, is not academically oriented. This is reflected in the courses in the bilingual program as well. Program staff members stated that there are not enough students to take the academic courses to justify additional classes.

Observations

The evaluator observed four classes: a Chapter 720 math skills class; a mechanical drawing class; a record keeping class; and social studies class. Two of the classes were conducted in English: mechanical drawing and record keeping. Of these two classes, one had a paraprofessional who answered questions and assisted the students with their work. In the other class, the English being used was within the level of ability of the students.

Of the two classes conducted primarily in Spanish, the social studies was conducted completely in Spanish whereas, in the Chapter 720 class, English was used in vocabulary practice. When reviewing and discussing the work individually with the student, the teacher used the language which he felt the student understood most easily.

In terms of grouping, half of the classes observed used whole group instruction almost completely and the other two used individualized instruction almost completely. The large group instruction was appropriate to the two classes observed (social studies and record keeping).

The material used in most classes observed was primarily teacher-prepared and more appropriate for the students than textbooks. In one case the text being used, although linguistically appropriate, seemed to be below the students' level in terms of subject matter and interest.

In all the classes observed, students seemed to be involved in the work and teachers were helping students learn. One class however, appeared to be working on subject matter below the students' level of ability or interest, resulting in a low involvement and participation by students.

MAINSTREAMING

Mainstreaming occurs when students have demonstrated a mastery of English through test scores, classroom performance, and teacher judgment. It may take place early, if the students have experienced difficulty with Spanish and are ready for the English class. In addi-

tion, students who have completed the math and science sequence may also be mainstreamed.

Student desire is a main factor in mainstreaming. Ninety-five percent of the students who complete E.S.L. continue with Spanish and social studies in Spanish. E.S.L. students are more resistant to mainstreaming when they finish the bilingual program sequence than non-E.S.L. participants (that is, students in mainstream or transitional English classes). In deciding about mainstreaming, parents are consulted if the student is in the consent decree category, but parents are typically amenable to it.

During 1980-81, bilingual students participated in 179 content-area classes in which English was the language of instruction. This is not the total number of students, since students were registered in many cases for more than one content-area course in English. A large number of these students were satisfying art, music, and hygiene requirements. Others receiving content-area instruction in English included twelve who took tenth year math, ten who took algebra, five who took chemistry, and seven who studied regents biology. A few took courses in physics, advanced chemistry, and psychology while eighteen students took the social studies sequence in English. See Table 8 for a listing of classes offered, number of students enrolled, hours offered, and criteria used for student selection.

About 50-60 percent of the program students take two or more of their content-area courses in English, including art, music, hygiene, and the practical arts. This is based on a register of 235 students at the end of May 1981 and a total number of 280 served over the year.

Students who are fully mainstreamed continue to receive counseling services from the bilingual program staff either as a result of referrals or because of the student's own initiative in seeking out the services.

Table 8. Mainstream classes in which program students are enrolled.

COMPONENT/SUBJECT	NUMBER OF STUDENTS	HOURS PER WEEK	CRITERIA FOR SELECTION
English 1 - 8	138	5	Teacher recommendation
English Elective	4	5	Elective
Learning Center	1	10	COH Placement
Fundamental Math	13	5	Teacher recommendation
Algebra	10	5	Teacher recommendation
Tenth year Math	12	5	Teacher recommendation
Eleventh year Math	2	5	Teacher recommendation
General Science	2	5	Teacher recommendation
Chemistry	5	5	Teacher recommendation
Regents Biology	7	5	Teacher recommendation
Physics	2	5	Teacher recommendation
Qualitative Analysis	1	5	Teacher recommendation
Hygiene	27	5	Requirement in sequence 11th grade
Psychology	2	10	Elective
American Studies	12	5	Teacher recommendation
Eastern Civilization	1	5	Teacher recommendation
Western Civilization	3	5	Teacher recommendation
Economics	2	5	Teacher recommendation
Art	21	5	Requirement in sequence 10-12th grade
Music	24	5	Requirement in sequence 10-12th grade
Business Typing*	12	5	Elective
Industrial Arts*	21	5	Elective

*In addition to bilingual classes.

V. NON-INSTRUCTIONAL COMPONENTS

The bilingual program, supported by Title VII funding, provides for curriculum development, guidance services for students, staff training, and opportunities for parental and community involvement.

CURRICULUM DEVELOPMENT

This is an important task in lending support to the instructional program since there do not appear to be too many appropriate materials available in the areas of business and industrial arts. Three of the four classes observed used teacher-developed materials to substitute for or supplement texts, because those available did not cover the curriculum or were too difficult. (See recommendations.)

During the year, the curriculum specialist has been developing a bookkeeping curriculum. It consists of a glossary of terms in Spanish and exercises in workbook form for introductory bookkeeping. The material includes transparencies, illustrations of accounts, income statements, and balance sheets. The material is organized into 24 chapters, each about five pages long and containing five to ten problems per chapter with application questions.

Materials presently used in record-keeping are primarily commercial in nature and in English. Those used in the mechanical drawing class are teacher-developed and in both English and Spanish.

In E.S.L., the curriculum is being revised by the director, who is developing about 30 writing lessons. These lessons will cover four semesters of work.

COUNSELING

The career counseling program is intended to assist students to better decide on career choices and to provide support to the practical arts program. Group career counseling meets once a week for students in industrial arts and business courses. Students meet in four groups of about seven to ten students and two groups of 23 and 20. Students use an interest inventory to clarify their interest in careers and a high school career course planner to program their high school courses. This program is being started on a schoolwide basis and the school has also been chosen as a pilot for career development. The evaluator met privately with a group of students participating in this activity. They all expressed satisfaction with academic and non-academic courses and with career counseling activities.

The counselor also meets with students for personal counseling. Students come of their own initiative or may be referred by program staff. A warm informal atmosphere in the bilingual office makes students feel welcome to use the services. The assistant director assists in the counseling effort during intake and registration and is available to discuss problems, especially dealing with programming throughout the school year. The counselor interviews newly admitted students and conducts exit interviews with those leaving for G.E.D. programs, college, or for other reasons.

Personal counseling helps students cope with the multiple pressures of home and the problems of adjustment to living in a new country. Many students are not living with either mother or father and often come to this country after not having seen their parents for many

years. Problems faced by students include cases such as that of a student who came to the office while the evaluator was there. She had been suspended and officially could not be in school but her mother did not want her at home during the day. She had no place to go, so she sought assistance at the bilingual office.

Students are also referred to alternative programs or social service organizations which may better serve their need. Some of the organizations which have provided services to program students have been the following:

-- The Roberto Clemente Center of the Bilingual Program in Auxiliary Services for High Schools takes students who do not want to stay in a regular school program;

-- The Castle Hill Educational Center and the East Harlem College Counseling Center have provided college preparation and orientation for students;

-- The Soundview Community Mental Health Center, the East Bronx Family Service Center, and the Hunts Point Center have all provided individual and family counseling;

-- Marist College has worked closely with the program to recruit graduates and presently there are 10 graduates from the previous bilingual program attending the college.

Adlai Stevenson High School, like many high schools of the inner city, is plagued with the problem of dropouts. This problem is particularly acute among students of Hispanic background. In the 1980-81 school year there were approximately 1,300 ninth graders registered in the whole school but only 650 registered in the twelfth grade -- a decrease of 50 percent. Hispanics registered even higher attrition. While 737 students were registered in the ninth grade, as of October 1980,

there were only 280 Hispanics in the twelfth grade -- a decrease in this case of 62 percent.

The bilingual program tends to suffer from the same problems facing the Hispanic population as a whole. It has been a continuing problem as can be seen from a review of the enrollment per grade in the previous bilingual program as illustrated in Table 9. The fact that so many students are overage for their grade (79 percent in grade 9, as Table 3 illustrates) may contribute to the attrition rate.

Table 9. Students served by the bilingual program, by grade from 1977 through 1981.

	1977-78	1978-79	1979-80	1980-81
Grade 9	95	110	130	97
Grade 10	65	78	78	57
Grade 11	58	67	45	53
Grade 12	68	40	32	28

A decision to accept more truant students into the program may be a factor in the attrition that has presently taken place. Additionally, after 1979-80, the program focused upon career education, which may have decreased the number of potential participants by attracting a narrower spectrum of students.

It is important to note that not all students leaving do so because they drop out. In an attempt to better understand the factors underlying the movement of students through and out of the program, data

were collected on the reasons given for students leaving the program during the 1980-81 school year (see Table 10). Some were fully mainstreamed; others transferred to another school or returned to their native country. The bilingual program needs to identify at an early stage the students most likely to drop out and to focus its counseling resources on them. It would seem that those overage ninth and tenth graders, for example, would be especially drop-out prone, since they are likely to be too old to be served before they can meet the requirements for graduation. In addition, data from Table 2 suggest that boys tend to leave

Table 10. Number of students leaving the program.

REASON FOR LEAVING	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Fully mainstreamed	2				2
Discharged/ transferred to altern. program	2				2
Transferred to another school	12	1	2	1	16
Graduated				11	11
Returned to Native Country	5	2	1		8
Removed from Program by Parental Option	2				2
Discharged (Reason Unknown)	1		1		2
Dropout	7	4		4	15
TOTAL	31	7	4	16	58

.Approximately 20 percent of the total program population left during 1980-1981.

.The majority of the students leaving the program were in the ninth grade.

.One-fifth of the students leaving the program were twelfth graders who graduated (3 percent of the total program population).

.Fifteen students (5 percent of the total program population) were dropouts.

the program more often than girls do. Boys, then, may experience greater pressures outside of school, indicating that they may need special support in order to keep them from dropping out. (See recommendations.)

STAFF DEVELOPMENT

Staff development has been limited to individual meetings on classroom methodology and to department meetings dealing primarily with administrative matters. The monthly departmental meetings have been used to deal with general issues and have not provided an opportunity for staff development on bilingual topics. The bilingual program has begun to meet separately in order to make the content of the meetings more useful to the bilingual program staff. The staff has registered for and taken courses at the university level. Table 11 contains a list of courses taken by the project staff during 1980-81.

During July and August, seminars are scheduled for the project staff in the areas of: meeting individual student needs; preparing teaching materials; and developing curriculum.

STAFFING

An examination of the characteristics of the program staff shows, with the exception of one individual, a staff highly experienced either in bilingual programs or in regular school programs. There are presently three teachers working out of license. From the evaluator's observation of two of the three, their lack of a license in the subject does not affect program students negatively, given their ability to teach the assigned subject appropriately. Several staff members are new to the project, however, due to staff turnover prior to and during the year.

Table 11. University courses attended by staff.

STAFF	INSTITUTION	GOAL	FRQUENCY	COURSE(S)
Secretary	C.C.N.Y.	M.S.in Guidance & Counseling	2 X weekly	Strategies in Learning & Counseling; Social Systems and Counseling; Seminars in Counseling
Curriculum Developer	L.I.U.	M.B.A.	2 X weekly	Marketing reseach; Managerial Economics
Guidance Counselor	Alferd Adler Inst. N.Y.U. Rockland Com. College	Therapist	2 X weekly	Theory & Practice of Psychotherapy; Continuous Case Seminar; Abnormal Psychology; Developmental Psych. I
1 Paraprofessional	Fordham University	Bilingual Teacher	3 X weekly	Toward degree in Bilingual Education

(See recommendations.) Table 12 provides information on the characteristics of project staff members.

PARENTAL INVOLVEMENT

The Parent/Student/Community Advisory Committee was formed and met at the beginning of the year. It consisted of four parents, two students, the counselor, and the director of the program. According to the program director meetings have not been held due to inability to find a convenient time for parents to meet and other problems related to attendance. Among the factors that have affected parent participation in general, are that the school is far from public transportation, and parents' feelings that they have little to say because their children are young adults. Parents of students without problems do not feel the need to participate, whereas parents of new arrivals generally do not become involved. Nevertheless, parents do participate in open school week twice a year, come to parent conferences, and informally maintain a lot of contact with the program. Telephone contact is frequently used to communicate with the parents.

AFFECTIVE DOMAIN

Stevenson High School experiences student antisocial behavior, vandalism, gang membership, and hard drug use to a very limited extent. These problems are experienced even to a lesser extent in the bilingual program.

Student attitude toward the program, although not amenable to quantification in any simple way, comprises an important dimension that is reflected in a number of indicators. These indicators are attendance,

Table 12. Staff characteristics: professional and paraprofessional staffs.

FUNCTION(S)	PERCENT OF TIME SPENT ON EACH FUNCTION	DATE APPT'D TO EACH FUNCTION	EDUCATION (DEGREES)	CERTIFICATION	LICENSE(S) HELD	YEARS OF EXPERIENCE (BIL SCHOOL)	YEARS OF EXPERIENCE (BIL SCHOOL)	YEARS OF EXPERIENCE (ESL)	OTHER RELEVANT PAST TRAINING
Coordinator	100	9/75	B.A. English M.A. Admin.(19?)	NYC	English DHS E.S.L. DHS Spanish DHS	4 years	6 years	2 years	----
Asst. Coord. Spanish Teacher	50 50	10/80 9/80	B.A. Spanish/39 cr. Guid. & Couns.	NYC	Spanish DHS E.S.L. DHS	2 years H.S. Spanish	none	6 years E.S.L. para	----
Counselor	100	9/75	M.A. E.S.L. M.A. Guid.& Couns.	NYC	E.S.L. DHS		6 years	4 years	Family counseling Alfred Adler Inst.
Curriculum Developer	100	9/80	B.A. Pol. Sci. M.B.A.	NYC	Bil. Soc. Stud.	½ yr. H.S.S.S.	6½ years	none	M.B.A.
Bil. Soc. Stud. Teacher	100	2/81	B.A. History/ Education	NYC NYS	Bil. Soc. Stud.	½ year	2½ years H.S.	none	----
Math/Science Teacher	60/40	2/80 9/80	B.A. Bil. Ed. CB M.A. Bil. Ed.	NYC NYS	Bil.Ed. CB &DHS TPDC Bil. Math.	1 year H.S.	2 years	none	----
720 Math Teacher	100	2/81	B.A. Spanish	NYC	TPDC Spanish	½ year	½ year	none	----
E.S.L. Teacher	100	9/76	B.A. French M.A. Education	NYC NYS	E.S.L. French	9 years	none	5 years	----
E.S.L. Teacher	100	2/81	B.A. Spanish M.S. Bil. Ed. M.S. Adminis.	NYC NYS	Spanish & Bil. Ed., Spanish H.S. & C.B.	½ year	2½ C.B.	½ year	----
Bil. Ind. Arts Teacher	40	9/80	P.D. Admin. B.S. Education M.S. Education	NYC NYS	Indus. Arts	12 years	1 year	none	----
Bil. Bus. Ed. Teacher	40	2/81	B.A. Education B.S. Science M.A. Education	NYC NYS	E.S.L. Dist. Ed. Dist. Ed.	10 years	½ year	5 years	Career Education
Paraprofessional	100	9/79	17 credits u/g	none	none	7 years	2 years	none	----
Paraprofessional	100	9/75	48 credits u/g	none	none	none	8 years	none	----
Paraprofessional	100	9/75	12 credits u/g	none	none	7 years	6 years	none	----
Paraprofessional	100	9/74	110 credits u/g	none	none	none	none	8 years	----
Math Teacher	80	9/77	M.A. Math ed.	NYC	Bil. Math DHS	3 years	4 years	none	----

college admissions, extracurricular activities, suspensions, and honorable achievements.

Attendance

In previous years, the bilingual program students had attendance rates which consistently exceeded that of the school at large. The figures for 1980-81 may be reversed. Again this may reflect a decision to accept into the program students with a history of truancy and reinforces the need to focus on these students. (See Table 26 in the findings section.)

Admittance to College

A high percentage of seniors in the bilingual program applied for and were admitted to college. Of 26 seniors, 12 were eligible to graduate and were admitted to college. Nine other seniors were also college bound but did not meet requirements for graduation this year. Of the remaining four, one is entering the army, one is undecided, one is working, and the fourth one is planning to enroll in a G.E.D. program.

After School Activity

Many of the students participate in TOLLEPS (Teaching of Occupation and Language for Limited English Proficiency Students), an after-school study program. Students also participate in two nearby church recreational programs, in college preparation programs, in varsity sports, peer counseling, and student government. A number of the students, about 40 percent in the higher grades, have after-school jobs. Many obtain employment through the summer youth employment programs.

Suspensions

This year the bilingual program had a rate of supension of 4.28 percent, approximately the same as the total school rate. While slightly lower than the school's rate, it reflects a tremendous increase within the program itself. Whereas last year there was one suspension in the program, this year there were 15. The director did not have an explanation of probable causes. It is suggested that an effort to identify the causes of suspensions be integrated with program attempts to identify and deal with potential dropouts. (See recommendations.)

Honorable Achievements

Program students have excelled in academic and other achievements. One student received the Governor's citation for scholarship. Another won second prize in an original poetry writing contest sponsored citywide by the Teachers of Spanish and Portuguese. The first Spanish Language Spelling Bee was won by a senior in the program. One program student won a four year, $1,000 per year scholarship from the United Federation of Teachers, while another student won a trip to Mexico in an essay contest. A Chinese student served by the program received a score of 750 on the SAT.

VI. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, science, and business and vocational education. The following are the areas assessed and the instruments used:

English as second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III)

Reading in Spanish -- Interamerican Series, Prueba de Lectura (total reading, forms CE and DE)

Mathematics achievement -- Matematicas Fundamentales, Alternate forms

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Business education performance -- Teacher-made tests

Vocational education performance -- Teacher-made tests

Attendance and suspension rates -- School and program records

The following analyses were performed:

On pre/post standardized tests of English and Spanish reading achievement and the teacher-constructed mathematics test statistical and educational significance are reported:

Statistical significance was determined through the application of correlated t-test model. . This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.[1] An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

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[1]Jacob Cohen. Statistical Power Analysis for the Behavioral Science (Revised Edition). New York: Academic Press, 1977 Chapter 2.

Thus, statistical and educational signficance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the followng effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = small ES

a difference of 1/2 = .50 = medium ES

a difference of 4/5 = .80 = large ES

The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment by students who received Title I E.S.L. instruction in the fall and spring semesters. Information is also provided on students' performance at the various test levels.

A linear correlation was calculated for total mastery rates on the CREST and attendance rates of non-Title I students only. Due to the reporting system for CREST results, Title I students could not be included in the calculations.

The results of the criterion referenced tests in mathematics, social studies, science, native language arts, and commercial arts are reported in terms of the number and percent of students passing teacher-made tests. The evaluation design specified a comparison of achievement levels between program participants and control group students. However, district-wide policy implemented during the 1980-81 school year eliminated the administration of school-wide uniform examinations in the high schools. Therefore, program participants did not take the same final examinations as students in the mainstream.

Information is provided on the attendance and suspension rates of students participating in the bilingual program, compared with that of the total school population.

The following pages present student achievement in tabular form.

Table 13. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students, fall)

	LEVEL I				LEVEL II				LEVEL III			
		Average Number of Objectives Mastered				Average Number of Objectives Mastered				Average Number of Objectives Mastered		
Grade	N	Pre	Post	Gain*	N	Pre	Post	Gain*	N	Pre	Post	Gain*
9	27	6.3	11.0	4.7	13	10.0	14.1	4.1	3	8.3	11.0	2.7
10	8	7.2	13.1	5.9	14	10.4	16.6	6.2	4	11.0	13.0	2.0
11	8	9.0	13.9	4.9	14	8.6	14.2	5.6	1	6.0	8.0	2.0
12	1	8.0	17.0	9.0	1	4.0	6.0	2.0	NO DATA			
TOTAL	44	7.0	12.1	5.1	42	9.5	14.8	5.3	8	9.4	11.6	2.2

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

- Ninety-four students (33 percent of all project students) were pre- and post-tested with the CREST in Title I E.S.L. classes.
- The majority of students functioned on lower levels of the CREST.
- Gains are higher at lower test levels, but students who functioned on Level III already had acquired 60 percent of the total objectives (9.4/15) at pre-test.
- The largest gains were made by students tested with Level II.

Table 14. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students, fall).

Grade	# of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	43	7.6	11.9	4.3	2.5	1.7
10	26	9.5	15.0	5.5	2.7	2.0
11	23	8.6	13.8	5.2	2.7	1.9
12	2	6.0	11.5	5.5	2.8	2.0
TOTAL	94	8.3	13.2	4.9	2.6	1.9

*Post-test minus pre-test.

- The total group gained an average of 4.9 objectives which almost exactly reached the program goal of five objectives.
- The total group mastered an average of 1.9 objectives for every month of E.S.L. instruction.
- Tenth- and twelfth-grade students demonstrated the largest gains.

Table 15. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students, spring)

	LEVEL I				LEVEL II				LEVEL III			
		Average Number of Objectives Mastered				Average Number of Objectives Mastered				Average Number of Objectives Mastered		
Grade	N	Pre	Post	Gain*	N	Pre	Post	Gain*	N	Pre	Post	Gain*
9	17	9.8	17.6	7.8	11	11.2	15.5	4.3	3	7.0	10.0	3.0
10	8	12.5	19.4	6.9	9	13.8	19.2	5.4	1	13.0	13.0	0
11	3	15.0	22.3	7.3	7	14.3	18.7	4.4	7	7.4	9.6	2.2
12		NO DATA			1	10.0	18.0	8.0		NO DATA		
TOTAL	28	11.1	18.6	7.5	28	12.7	17.6	4.9	11	7.8	10.0	2.2

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

- Sixty-seven students (24 percent of all project students) were pre- and post-tested with the CREST in Title I E.S.L. classes.
- Compared to fall results, a higher percentage of students functioned on Level III in spring.
- Students tested with Level I made by far the largest gains.
- The smaller gains for students tested with Level III may be due to the smaller number of objectives on that level, and the higher level of English language skills demonstrated at pre-test.

Table 16. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students, spring).

Grade	# of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	31	10.0	16.1	6.1	2.8	2.2
10	18	13.2	18.9	5.7	3.0	1.9
11	17	11.6	15.6	4.0	2.8	1.4
12	1	10.0	18.0	8.0	2.8	2.9
TOTAL	67	11.2	16.8	5.6	2.8	2.0

*Post-test minus pre-test.

- The total group gained an average of 5.6 objectives.
- The total group mastered an average of 2.0 objectives for every month of instruction.
- The overall learning rate of the total group in spring is just slightly higher than its fall performance, even though in spring students received advanced E.S.L. instruction.
- The eleventh graders were the only group not exceeding the program goal of five objectives per semester.

Table 17. Means, standard deviations, and correlation for CREST mastery and project attendance.

(non-Title I students, entire year)

Variable	N	Mean	S.D.	Correlation	P
CREST Mastery	59	11.4	4.6	.27	.05
Attendance	59	88.6	6.2		

- Students with high attendance rates show a small, but statistically significant tendency to have higher levels of English language growth. Students with poor attendance tended to show small growth on the CREST.

- The significant positive relationship between CREST mastery and attendance rates fulfilled the stated program objective.

Table 18. Native language reading achievement for Spanish-speaking students.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Inter-American Series Prueba de Lectura (total reading, forms CE and DE).

		Pre-test		Post-test						
Grade	N	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	32	42.0	18.9	48.5	21.7	6.5	.44	1.69	NS	.30
10	23	51.1	21.5	65.5	16.7	14.4	.35	3.10	.005	.65
11	27	47.2	21.7	62.4	16.7	15.2	.52	4.10	.001	.79
12	13	56.6	18.1	68.2	13.2	11.6	.67	3.10	.01	.86

.Ninth-grade students failed to show a statistically significant gain by a very small margin. However, the gain was judged to be educationally significant.

.Students in grades 10 through 12 demonstrated statistically and educationally significant gains.

Table 19. Mathematics achievement for Spanish-speaking students.

Significance of mean total raw score differences between initial and final test scores in mathematics achievement of students with full instructional treatment on the Matematicas Fundamentales (Alternate Forms, teacher-constructed tests)

(Chapter 720 students, combined sample)

N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean*	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
15	13.8	5.6	19.9	6.1	6.1	-.40	2.39	.05	.62

*Possible score range 0-35.

.Students demonstrated a statistically and educationally significant gain.

.The pre/post correlation suggests that the reliability of the results is open to very serious doubt because of the restricted number of items on the test and the small number of students reported.

Table 20 . Number and percent of students passing teacher-made examinations in mathematics.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	80	6	8%	70	42	60%
10	34	5	15%	39	20	51%
11	21	13	62%	29	14	48%
12	10	8	80%	3	2	67%
TOTAL	145	32	22%	141	78	55%

.The overall pass rate in fall was 22 percent.

.The overall pass rate in spring was 55 percent.

.The fall pass rates vary substantially among grades.

Table 21. Number and percent of students passing teacher-made examinations in science.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	33	18	55%	22	7	32%
10	28	7	25%	26	8	31%
11	8	2	25%	4	2	50%
12	1	1	100%	1	1	100%
TOTAL	70	28	40%	53	18	34%

- The overall pass rate for fall was 40 percent.
- The overall rate for spring was 34 percent.
- Pass rates vary substantially among grade levels in both semesters.

Table 22. Number and percent of students passing teacher-made examinations in social studies.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	47	3	6%	54	10	19%
10	34	17	50%	21	11	52%
11	38	21	55%	26	15	58%
12	8	4	50%	11	8	73%
TOTAL	128	45	35%	112	44	39%

- The overall pass rate in fall was 35 percent.
- The overall pass rate in spring was 39 percent.
- The lowest pass rates occurred for ninth graders in each semester.

Table 23. Number and percent of students passing teacher-made examinations in commercial record keeping.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	13	6	46%	5	2	40%
10	11	10	91%	7	6	86%
11	2	2	100%	2	1	50%
TOTAL	26	18	69%	14	9	64%

- The overall pass rate in fall was 69 percent.
- The overall pass rate in spring was 64 percent.
- Pass rates are generally higher in fall.

Table 24. Number and percent of students passing teacher-made examinations in typing.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	3	2	67%	4	2	50%
10	1	1	100%	2	1	50%
11	8	8	100%	8	6	75%
12	5	5	100%	5	4	80%
TOTAL	17	16	94%	19	13	68%

- The overall pass rate in fall was 94 percent.
- The overall pass rate in spring was 68 percent.
- Pass rates are consistently higher in fall.

Table 25. Number and percent of students passing teacher-made examinations in vocational education.

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	17	11	65%	19	12	63%
10	5	4	80%	5	5	100%
11	7	5	71%	5	3	60%
12	2	1	50%		NO DATA	
TOTAL	31	21	68%	29	20	69%

.The overall pass rate in fall was 68 percent.

.The overall pass rate in spring was 69 percent.

Table 26. Significance of the difference between attendance percentages of program students and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 74.2%

Grade	N	Mean Percentage	Standard Deviation	Percentage Difference	t	p
9	108	69.5	29.9	-4.7	-1.32	NS
10	54	84.2	21.9	10.2	3.32	.005
11	51	86.2	13.8	12.0	6.15	.001
12	29	81.1	23.2	6.9	1.57	NS
TOTAL	242	77.7	25.7	1.6	2.12	.025

- The attendance rate for the total program (78 percent) was significantly higher than the average school-wide attendance rate (74 percent).
- Ninth graders attended at approximately the same rate as the average non-program student.
- Tenth- and eleventh-grade students had attendance rates which were significantly higher than the total school rate.
- Eleventh graders attended at more uniform rates than students in other grades.

Suspension Rates

The suspension rate for bilinqual program students was 4.5 percent. This compares with a reported rate of 4.3 percent for the school as a whole. It was not possible to test the statistical signifi-cance of the small difference between these two figures because the precise numbers of students involved were not reported. For all practical purposes, however, the two figures appear to be essentially equal.

SUMMARY OF FINDINGS

In English reading achievement in the fall, program students almost exactly reached the program goal of five objectives mastered each semester. In the spring, ninth-, tenth-, and twelfth-grade students met and surpassed the criterion in this area.

In native language reading, students in grades 10 through 12 demonstrated statistically and educationally significant gains as did a small group of students who were assessed in mathematics achievement. The results for this latter group, however, were judged to be unreliable due to the restricted number of items on the test and the small number of students reported.

The overall pass rate in the fall in mathematics was 22 percent. In spring, the overall pass rate was 55 percent. Although the pass rates varied substantially among grades, the highest scores were achieved by the twelfth-grade students in both fall and spring.

In science, the overall pass rate in the fall was 40 percent. The spring overall pass rate was 34 percent. Again, pass rates varied substantially among grade levels.

In social studies, the overall pass rate was 35 percent in the fall and 39 percent in the spring. The lowest pass rates occurred among ninth graders in each semester.

The overall pass rate in the fall in commercial record keeping was 69 percent. In spring, the overall pass rate was 64 percent. Students demonstrated higher pass rates in the fall than in spring in this area.

In typing, the overall pass rate in the fall was 94 percent and 68 percent in the spring. Again, students demonstrated higher pass rates in fall than in spring.

In vocational education, the overall pass rate in the fall was 68 percent and in the spring the overall pass rate was 69 percent. The highest scores in this area were achieved by a small group of tenth graders.

The attendance rate for the total program was significantly higher than the average school-wide attendance rate and the rate of suspension for bilingual program students was essentially equal to that of the school as a whole.

VII. CONCLUSIONS AND RECOMMENDATIONS

In its first year of funding, the staff members of Project BATEY have worked to implement a program which will address the needs of Hispanic youngsters for career orientation and classes in addition to instruction in the academic content areas. New career courses were developed and offered, although the need for materials remains. New staff members were hired. Group counseling, in addition to personal counseling and grade advisement, was provided to promote the clarification of career goals as well as to offer personal support for students. In addition, the program has continued to offer individualized programming and varied academic experiences to those students desiring them.

Given the shortage of appropriate materials in business education and industrial arts courses, and the number of new staff in the program, the emphasis during the summer staff development program should be on assisting teachers to develop curriculum materials for the following school year and on developing skills and strategies for more effective planning and teaching the linguistically, academically, and culturally heterogeneous groups they will continue to serve. In addition to the departmental meetings, separate in-service training should be continued on a regular basis using classroom experiences to develop educational strategies.

An examination of some of the characteristics of the students served by project suggests that during 1980-81 the program has had to contend with a particular constellation of problems which have implications for student success in school. The data indicate that most students

are overage for their grade, suggesting interrupted educational experiences or previous academic failure. In interviews, staff members indicated that it is particularly the United States-born students (15 percent of the students served), who are likely to suffer from partially-developed skills in both English and Spanish, and whose academic performance suffers as a result. Staff members also expressed the feeling that there is a tendency for students, especially in the ninth grade, to drop out of school. Attendance rates are lowest in that grade, as is performance in content-area classes as a whole. The number of students served declines after grade nine, also suggesting that some students do not return. The pattern of poor attendance and low achievement seems to especially affect males, who generally represent a lower proportion of students served as the grade level increases.

While the problems of the ninth graders seem especially salient, there is a general pattern of low achievement in the content areas (mathematics, science, and social studies), which may be accounted for in part by the fact that Project BATEY is designed to attract career- rather than college-oriented students. Nevertheless, passing rates in these content areas are generally low. A closer, if preliminary, look at the achievement data suggests that there may be a relationship between attendance and achievement; that is, students who are motivated to come to class are more successful than those who are absent more than half of the time. An analysis of achievement data by attendance would probably confirm this impression.

The data suggest that program students may have, indeed, very different characteristics and needs. These characteristics, coupled with

a pattern of low achievement and attendance among some students, pose a challenge to program staff. The following recommendations are designed to address these interrelated problems.

As absenteeism is probably a contributing factor to the high failure rates in the content areas (particularly in the ninth grade), a significant effort should be made to improve student attendance. One approach could include the use of the paraprofessional as a family assistant to follow up promptly on absences when they occur. A weekly classroom reporting form, on which absentees and academic problems are entered, could be distributed to teachers serving program students for follow-up action. At the very least, form letters advising parents of absences or academic difficulties could be sent.

A preventive counseling approach is needed which will identify through a variety of means, at the beginning and throughout the year, students experiencing social and academic difficulties and who are at the greatest risk of dropping out. More home contact and follow-up with parents early in the year may help to resolve problems more quickly. Again, the use of a paraprofessional as family worker could provide support for this important function.

The guidance program could be used in part to provide assistance to the potential dropout, possibly assisted by peer tutoring and peer counseling activities. It is to be hoped that the career education program, as it expands, will address student needs for job-oriented skills and will as a result improve student motivation for attending school.

Given the performance levels in the content areas, it is recommended that the courses of study for the content areas of science, social studies, record keeping and typing be reviewed. More frequent monitoring and testing of students may be needed in order to make timely interventions, especially in the ninth grade.

The evaluators are aware of the complexity of the problems which the staff members of Project BATEY are confronting. Most have had a good deal of experience in dealing with bilingual students, and have made efforts to develop (under previous programs) materials to address a range of student needs and levels of preparation in the content areas. It appears that continued efforts will be required to identify student needs and develop materials which are appropriate to both the cognitive and linguistic characteristics of the students served. The problems faced by the staff of Project BATEY are not uncommon in large city school systems. The commitment and continuing efforts of staff members to adapt a program to meet complex needs are to be commended. The first steps have been taken. Staff members are encouraged to continue to develop the career component and drop-out prevention services (given the limits of the resources), to best serve those students who appear to be most in need.